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(54) MICRO ELECTROMECHANICAL SYSTEM CONTROLLED ORGANIC LED AND PIXEL ARRAYS AND METHOD OF USING AND OF MANUFACTURING SAME

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(57) ABSTRACT

Organic light emitting devices are disclosed that use a micro electromechanical system (MEMS) structure to enable a pixel and pixel array wherein each pixel contains a MEMS and an OLED element. A MEMS structure is used for switching the OLED element. These OLED/MEMS pixels can be fabricated on flex circuit, silicon, as well as other inorganic materials. They can be fabricated in a large array for developing a 2-dimensional display application and each pixel can be addressed through conventional matrix scanning addressing scheme. The ability of fabricating these OLED/MEMS pixels on flexible organic substrates as well as other rigid substrates enables wider selection of substrate materials for use with different applications.

5 Claims, 5 Drawing Sheets

